GPS AutoSteer System
Installation Manual

Supported Vehicles

Case STX Wheeled or Quadtrack	Case STEIGER Wheeled or Quadtrack	New Holland TJ	New Holland T
380	380	380	9030
430	385	430	9040
480	430	480	9050
530	435	530	9060
	480		
	485		
	530		
	535		

Accuguide Ready Articulated

PN: 602-0238-01-A

LEGAL DISCLAIMER

Note: Read and follow ALL instructions in this manual carefully before installing or operating the AutoSteer system.

Note: Take careful note of the safety information in the Safety Information section and throughout this manual.

The manufacturer disclaims any liability for damage or injury that results from failure to follow the instructions and warnings set forth herein.

Please take special note of the following warnings:

1. There is NO obstacle avoidance system included in the manufacturer's product. Therefore, users must always have an operator on the equipment when the AutoSteer system is in use to look for any obstacles including people, animals, trees, ditches, buildings, etc.
2. During installation of the AutoSteer system and during the Calibration and Tuning processes the vehicle steering system articulates the frame and the vehicle wheels or tracks move. Be sure that all people and obstacles are clear of the vehicle before engine startup, calibration, tuning or use of the AutoSteer system.
3. Use of the AutoSteer system is NOT permitted while the vehicle is on public roads or in public areas. Ensure that the system is OFF before driving on roads or in public areas.

Special Requirements

Tools

This list consists of the tools required to complete the installation. The installer is assumed to have a complete set of common installation tools.

13mm wrench	3/8" wrench	#1 Phillips screwdriver
14mm wrench	7/16" wrench	#2 Phillips screwdriver
13mm socket and ratchet and extension	1/2" wrench	Hack saw
14mm socket and ratchet	9/16 wrench	Side cutters
17mm socket and ratchet	9/16 socket and ratchet	Tape measure 12 ft (3.6m) minimum
24mm socket and ratchet	8mm wrench	5mm Allen wrench
5/32 Allen wrench	1/8" Allen wrench	Cleaning brush

Safety Information

Warning Alerts

The AutoSteer system installer and manufacturer disclaim any responsibility for damage or physical harm caused by failure to adhere to the following safety requirements:

- As the operator of the vehicle, you are responsible for its safe operation.
- The steering system is *not* designed to replace the vehicle's operator.

Note: Verify all screws, bolts, nuts, hose connections and cable connections are tight after the final installation of the AutoSteer system.

⚠ WARNING

To avoid electrical shock hazards, remove the Roof Module from the vehicle before driving under low structures or low electrical power lines.

⚠ WARNING

To prevent injury from falling, ensure you are in a stable position on the vehicle when installing or removing the Roof Rail and Roof Module. If the vehicle does not provide a safe platform, use a ladder to safely access the vehicle roof while installing or removing the Roof Rail and Roof Module.

⚠ WARNING

To prevent accidental death or injury from being run over by the vehicle, never leave the vehicle's operator chair with the GPS system engaged.

⚠ WARNING

High-Pressure Fluid Hazard

Read the Owner's Manual before installation. Wear hand and eye protection while performing hydraulic system maintenance. Relieve hydraulic system pressure before servicing the hydraulic system.

⚠ WARNING

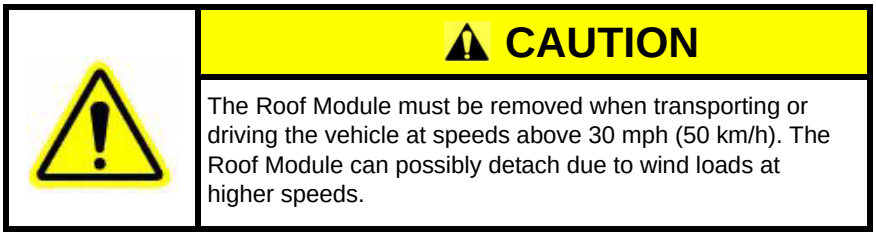
To understand the potential hazards associated with the operation of AutoSteer equipment read the provided documentation before installing the AutoSteer system on a vehicle.

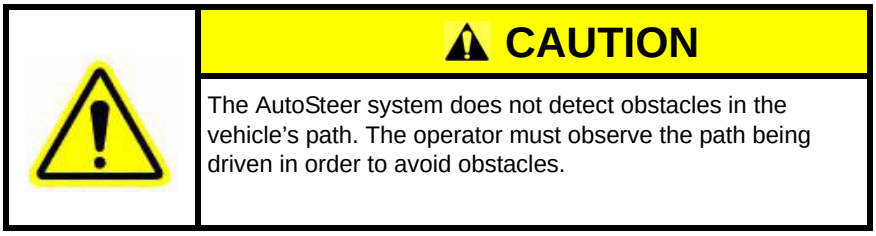
⚠ WARNING

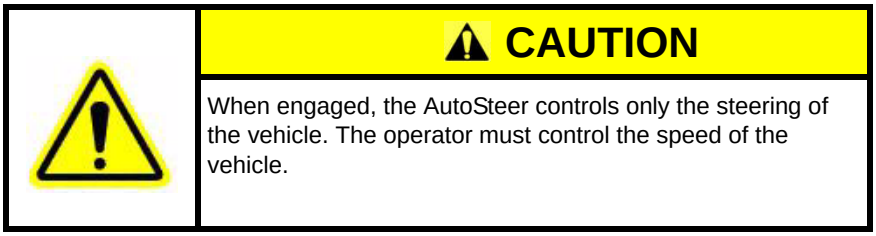
To prevent the accidental engagement of AutoSteer system and loss of vehicle control while driving on roads, shut down the AutoSteer system (exit the program). Never drive on roads or in public areas with the AutoSteer system turned on.

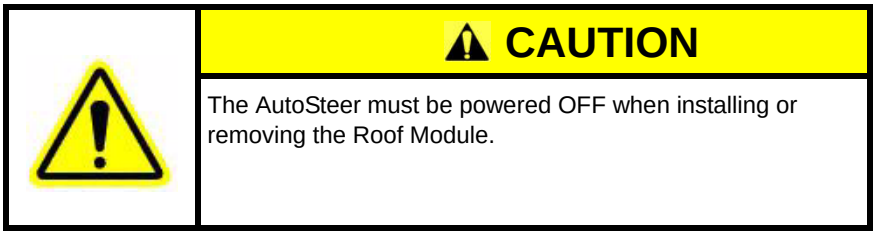
Caution Alerts

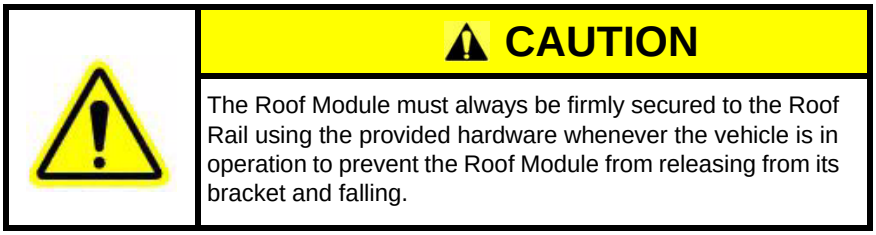
The AutoSteer system installer and manufacturer disclaim any responsibility for damage or physical harm caused by failure to adhere to the following safety requirements:


CAUTION
The Roof Module must be removed when transporting or driving the vehicle at speeds above 30 mph (50 km/h). The Roof Module can possibly detach due to wind loads at higher speeds.


CAUTION
The AutoSteer system does not detect obstacles in the vehicle's path. The operator must observe the path being driven in order to avoid obstacles.


CAUTION
When engaged, the AutoSteer controls only the steering of the vehicle. The operator must control the speed of the vehicle.




CAUTION
The Roof Module must always be firmly secured to the Roof Rail using the provided hardware whenever the vehicle is in operation to prevent the Roof Module from releasing from its bracket and falling.

Vehicle Requirements

The vehicle must be Accuguide Ready from the factory. This means it has an Electro hydraulic valve for autosteer, a flow switch for manual override and a wiring loom that brings all these electrical connections to a bulkhead connector in the cab floor. There also is some type of turn angle sensor from the factory. However, that sensor is not necessarily used by the Autosteer system.

The vehicle steering and hydraulic systems must be in good working order before installing the AutoSteer system. Check for loose or worn parts. Before installing the AutoSteer system drive the vehicle and confirm that it steers straight and the wheels can be turned from lock to lock. Check the steering system hydraulic hoses and connections to ensure there are no oil leaks.

The vehicle electrical system and battery must be in good working order.

The vehicle should be fully cleaned before installing the AutoSteer system. A clean vehicle improves overall installation and cable routing.

Important Information

Note: Verify that all screws, bolts, nuts and cable connections are tight after the final installation of the AutoSteer system.

Technical Support

Refer to your owner's manual for technical support information.

Contact Information

Refer to your owner's manual for contact information.

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Table of Contents

Chapter 1 **Installation Overview** **1**
- Vehicle Inspection 1
- Installation Procedure Outline 2
- Kit Overview 3
- Cable Diagram 5

Chapter 2 **Wheel Angle Sensor (WAS) Installation** **7**
- Determine if Your Vehicle Needs a Wheel Angle Sensor 7
- Wheel Angle Sensor Installation Procedure 10
  - Mounting Wheel Angle Sensor Hardware 11
  - Cutting Linkage Rods to Length 13
  - Assembling Linkage Rod Hardware 15
  - Attaching and Adjusting Wheel Angle Sensor Linkage Rods 18

Chapter 3 **SA Module Installation** **27**
- Installation Procedure 27

Chapter 4 **Roof Module Installation** **31**
- Safety Notes 31
- Installation Procedure 32

Chapter 5 **Display Installation** **37**

Chapter 6 **Connecting System Cables** **41**
- SA Module Harness 41
  - SA Module Connection 42
  - Optional AutoSteer Wheel Angle Sensor 49
- Main Cable Harness 51
  - Roof Module 51
  - Display 55
- Power Supply Connection 55
  - Cab Power Connection 56
  - Battery Power Connection 56
- Install Warning Label 58

Chapter 7 **Post-Installation Procedures and Information** **59**
- Verify the Vehicle is Ready for AutoSteer 59
- Calibration and Tuning Notes 59

Chapter 8 **Final Hardware Installation Checklist** **61**

Installation Overview

This **Installation Overview** chapter contains part numbers, kit overview diagram, cabling diagram and the installation procedure for the Case STX Accuguide Ready Installation Kit.

- *Vehicle Inspection*
- *Installation Procedure Outline*
- *Kit Overview*
- *Cable Diagram*

This installation guide describes the AutoSteer system installation on several models of Case STX and Steiger, New Holland TJ and New Holland T Wheeled and Quadtrack vehicles. The AutoSteer installation kit PN: 188-0035-01 is used on these vehicle series.

Note: If you are installing an electric steering wheel actuator such as OnTrac II, skip the SA Module, Steering Valve connection and System Cable connection installation provided in this manual. Refer to your electric steering product manual for additional instructions.

Vehicle Inspection

Before beginning the AutoSteer system installation confirm the vehicle steering system is in good working order. Drive the vehicle and verify the vehicle is in correct working order. Also, ensure the following system operations and components:

- Verify you can turn the vehicle.
- Ensure the vehicle steers straight.
- Check for loose or worn steering components.
- Check for hydraulic fluid leaks throughout the system.
- Ensure the hydraulic fluid level is correct.
- Service the vehicle if the steering is not in good working order.

Installation Procedure Outline

1. Verify shipped components.
2. Install the Wheel Angle Sensor if necessary.

Note: Some vehicles come equipped with a sensor in the steering cylinder which can be used as the wheel angle sensor. However the wheel angle sensor is optional and most installations do not require a wheel angle sensor. If you decide that a Wheel Angle Sensor is required, you have the option of connecting to the existing cylinder sensor (on older vehicles) or installing the optional AutoSteer Wheel Angle Sensor.

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3. Install the SA Module.
4. Install the Roof Module.
5. Install the display.
6. Install the SA Module Harness.
7. Install the Main Cable Harness.
8. Ensure all connectors are properly coupled.
9. Power ON the AutoSteer system.
10. Calibrate the vehicle.
11. Tune the vehicle.
12. Verify installation and system operation.

Kit Overview

Figure 1-1 Case STX Accuguide Ready Kit Components (PN: 188-0035-01)

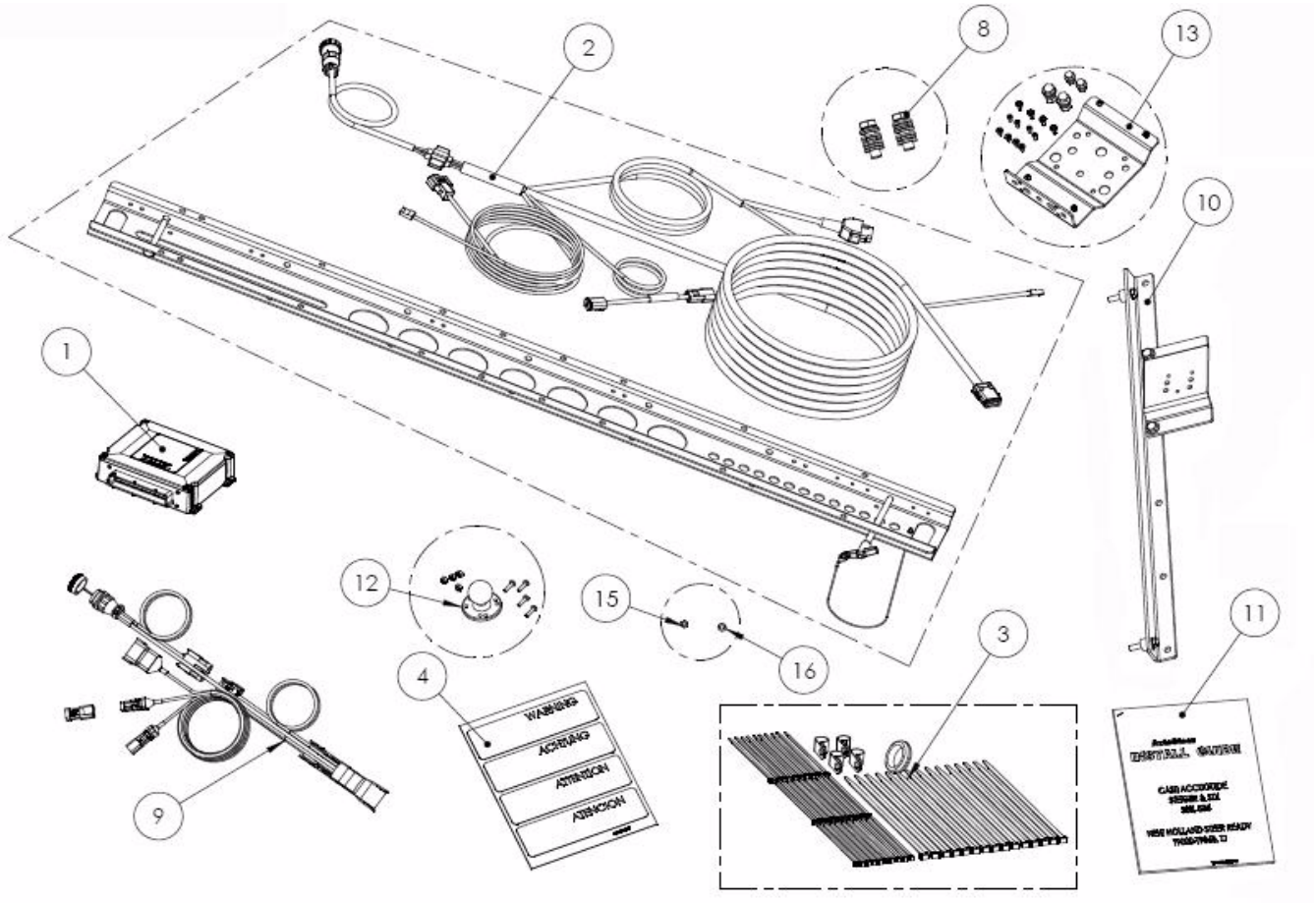
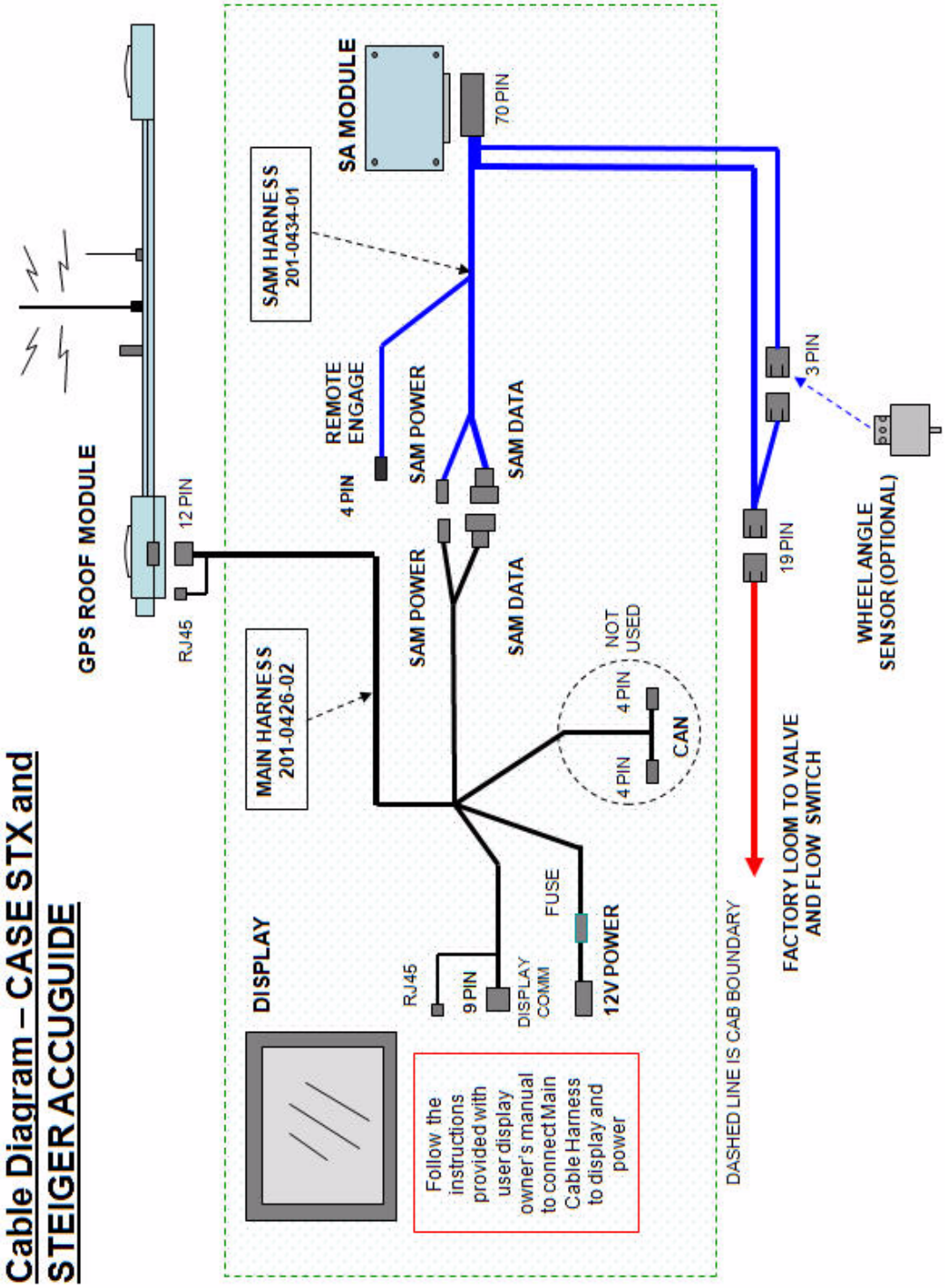


Table 1-1 Installation Kit Sub-Assembly Components (PN: 188-0035-01)

Item	Component	Part Number
1.	SA Module	200-0206-01
2.	Common Kit	200-0497-02
3.	Mounting Hardware	200-0174-01
4.	Warning Labels	603-0074-01
8.	Cab Roof Bolt Kit	200-0451-01
9.	SA Module Harness	201-0434-01
10.	Monitor Bracket Assembly	200-0256-02
11.	Installation Guide	602-0238-01

Item	Component	Part Number
12.	RAM Base Kit	200-0508-01
13.	SA Module Bracket Assembly	200-0190-01
15.	Hex Nut	519-0009-01
16.	Washer	517-0014-01

Cable Diagram



Wheel Angle Sensor (WAS) Installation

This **Wheel Angle Sensor Installation** chapter information is provided in the following sections:

- *Determine if Your Vehicle Needs a Wheel Angle Sensor*
- *Wheel Angle Sensor Installation Procedure*
  - *Mounting Wheel Angle Sensor Hardware*
  - *Cutting Linkage Rods to Length*
  - *Assembling Linkage Rod Hardware*
  - *Attaching and Adjusting Wheel Angle Sensor Linkage Rods*

Determine if Your Vehicle Needs a Wheel Angle Sensor

The first step is to determine if you need to install a wheel angle sensor. If the vehicle has a sensor in the steering cylinder with a 3-pin rectangular Deutsch plug you do not need to install an AutoSteer wheel angle sensor.

Upon determining the need for the installation of the Autosteer Wheel Angle Sensor, there are two connection options available:

1. If the tractor has a steering cylinder as shown in *Figure 2-1*, you can connect the SAM harness directly to the cylinder steering sensor through the factory loom.
2. If the tractor has a steering cylinder as shown in *Figure 2-2* or an Autosense device as shown in *Figure 2-3*, you must install the AutoSteer Wheel Angle Sensor using the instructions provided in this manual.

1. Inspect the vehicle steering cylinder on the right-hand side of the machine for the steering sensor connections shown in *Figure 2-1* or *Figure 2-2*.

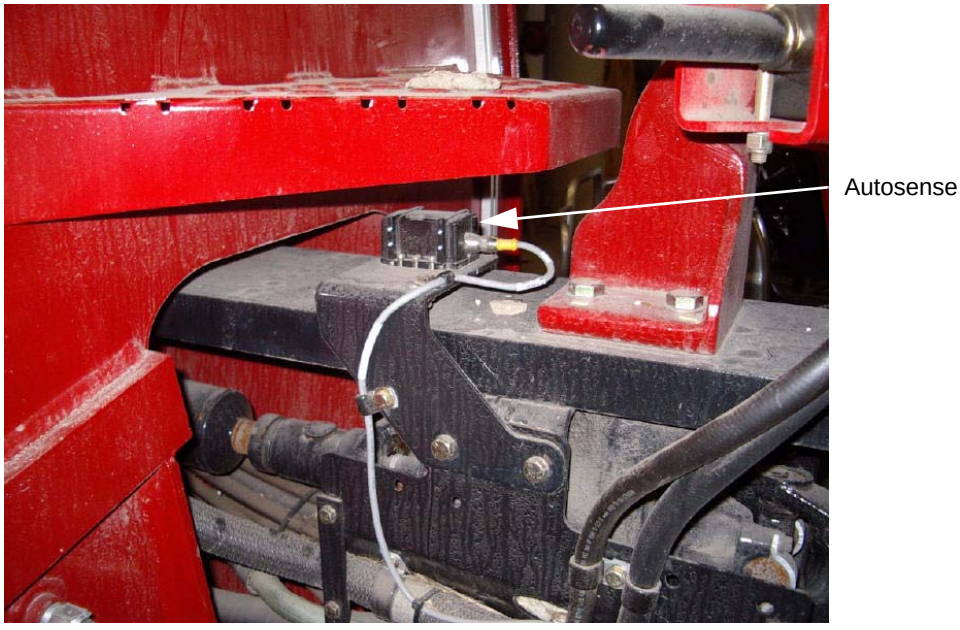
Note: If the vehicle has the type of steering cylinder sensor shown in *Figure 2-1* you do not need to install a Wheel Angle Sensor. Skip the Wheel Angle Sensor installation procedure and proceed to SA Module installation.

Figure 2-1 Steering Cylinder Sensor Connection

Note: If the vehicle has the type of sensor built into the cylinder as shown in *Figure 2-2* or an Autosense device as shown in *Figure 2-3* install the AutoSteer Wheel Angle Sensor as shown in the *Wheel Angle Sensor Installation Procedure* on *page 10*.

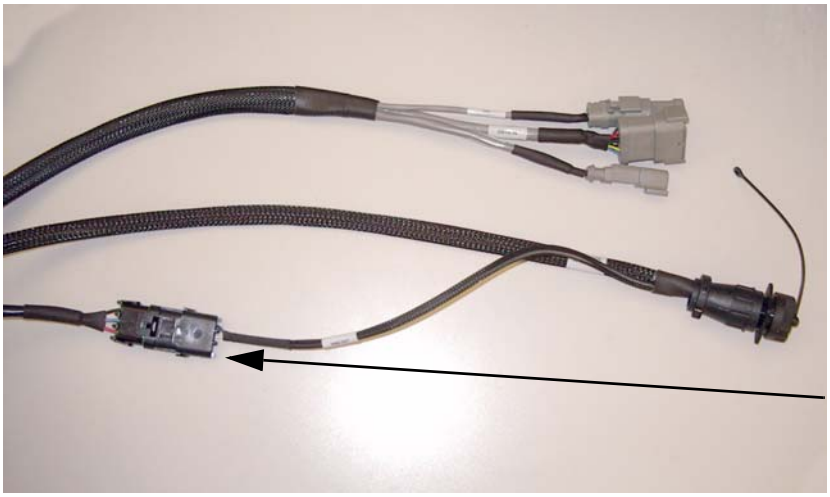
Figure 2-2 Steering Cylinder Sensor Connection

Figure 2-3 Autosense Device



Note: If you do not need a Wheel Angle Sensor, leave the WAS IN connector plugged into the WAS OUT connector on the SAM harness.

Figure 2-4 WAS In Connector Attached to WAS Out Connector



Wheel Angle Sensor Installation Procedure

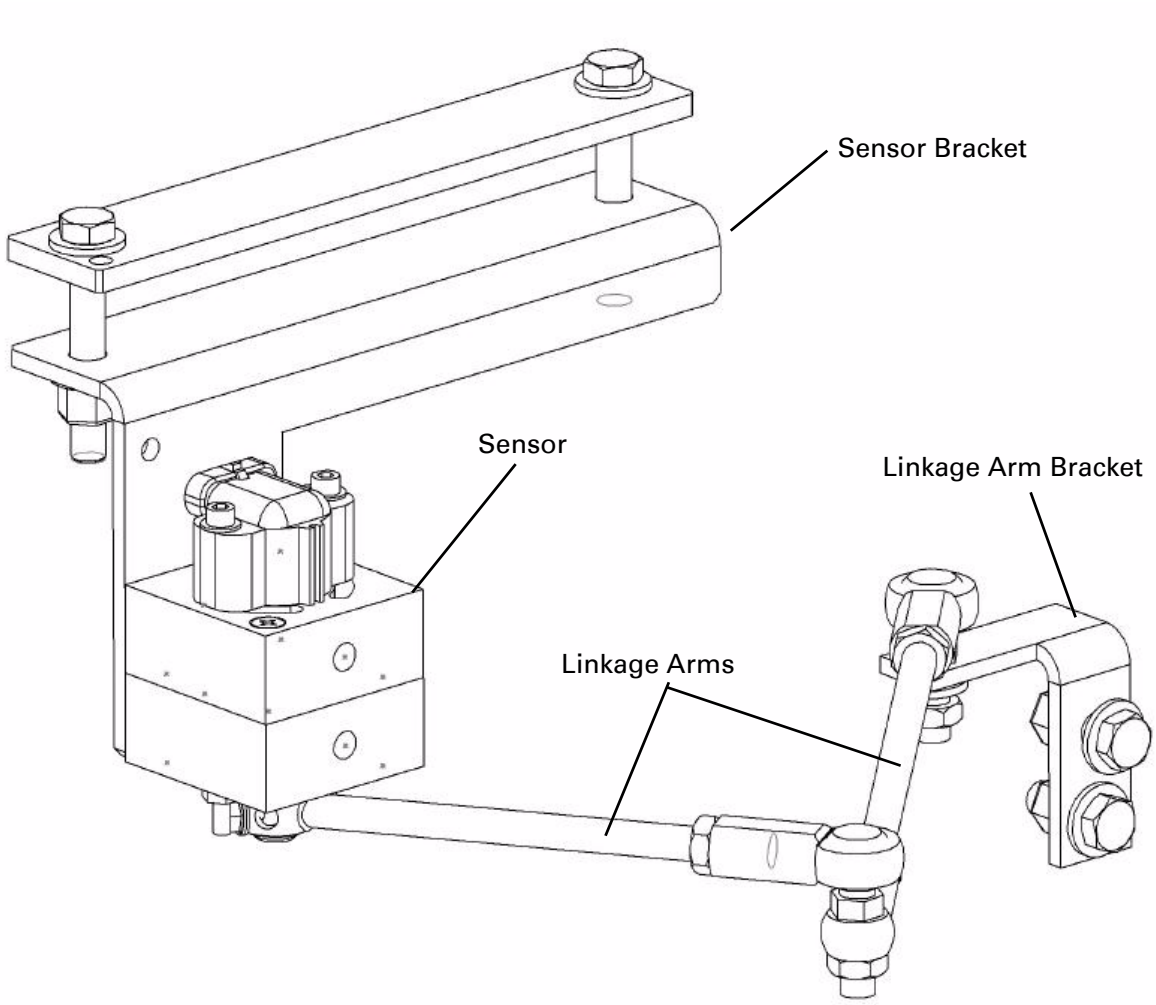
The AutoSteer Wheel Angle Sensor installation procedure is provided in the following sections:

- *Mounting Wheel Angle Sensor Hardware*
- *Cutting Linkage Rods to Length*
- *Assembling Linkage Rod Hardware*
- *Attaching and Adjusting Wheel Angle Sensor Linkage Rods*

Mounting Wheel Angle Sensor Hardware

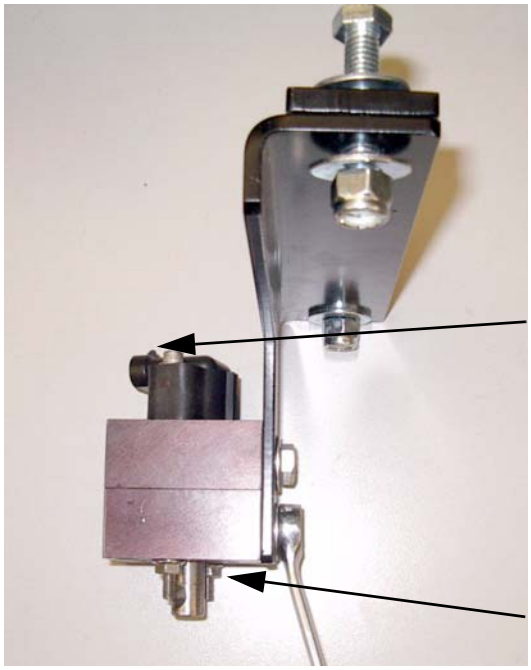
1. The Wheel Angle Sensor components are shown in *Figure 2-5*.

Figure 2-5 Wheel Angle Sensor Components



2. Preassemble the sensor on the bracket before vehicle installation. See *Figure 2-6*.

Figure 2-6 Attaching the Sensor to the Bracket



Cutting Linkage Rods to Length

Note: Before cutting the linkage rods, verify the wheel angle sensor brackets will attach to the vehicle as shown in this manual and they are attached the correct distance from any reference points shown. If this is not possible, do not cut the rods until it is determined if these lengths will work for your installation. Due to possible variations in the mounting positions, these measurements could be different. These measurements are provided as a reference only. The installer is responsible for ensuring the rods are cut to the proper length.

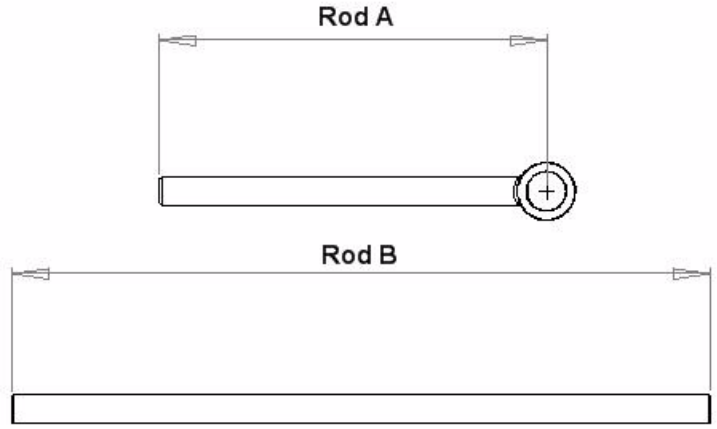
1. Measure and mark the two linkage rods for cutting, according to the length shown in *Table 2-1*.

Note: *Figure 2-7* shows the measurement points used to properly cut the linkage rods.

Table 2-1 Linkage Rod Cut Lengths

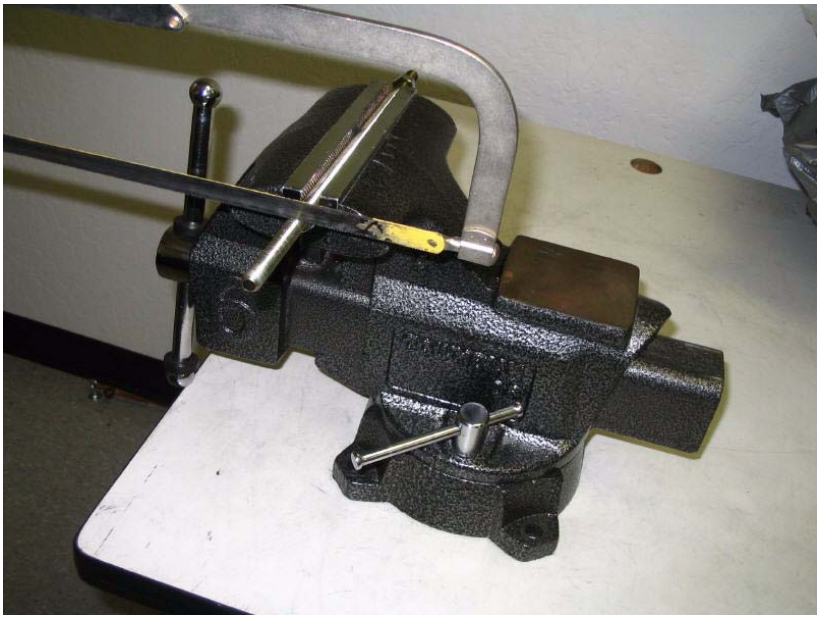
Item	Length
Rod A	5.5 inches (140 mm)
Rod B	8.5 inches (216 mm)

Figure 2-7 Linkage Rod Cut Length Measurement Points



2. Use a hack saw to cut the linkage rod to length while it is held in a bench vise. See *Figure 2-8*.

Figure 2-8 Linkage Rod Cutting

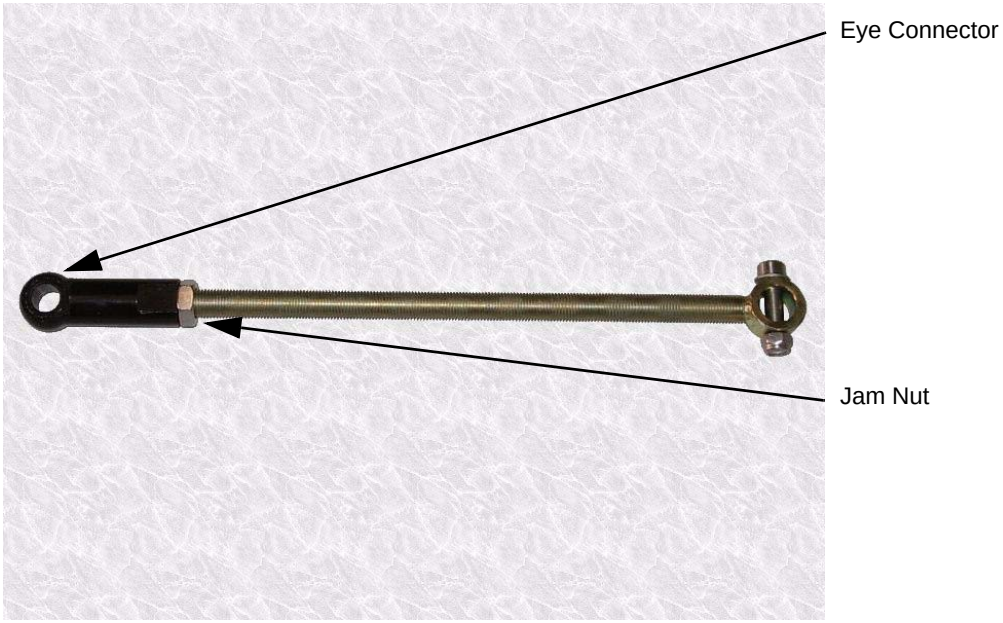


Assembling Linkage Rod Hardware

1. Attach a jam nut to the end of Rod A. See *Figure 2-9*.
2. Connect the eye connector to the end of the wheel angle sensor rod. As shown in *Figure 2-9*.

Note: The threaded rods must be cut to the correct lengths before final assembly.

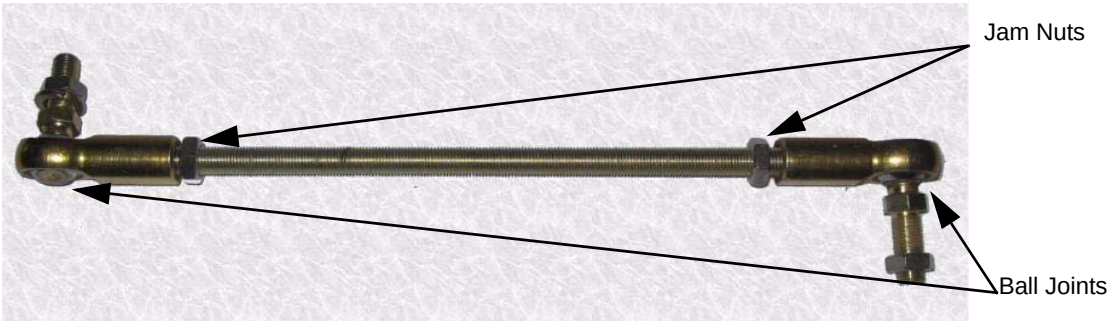
Figure 2-9 Rod A Assembled



3. Attach the jam nuts to each end of linkage Rod B
4. Attach the ball joints to both ends of the linkage arm as shown in *Figure 2-10*.

Note: The bolts for the ball joints should be facing the opposite direction as shown in *Figure 2-10*.

Figure 2-10 Linkage Rod Assembled

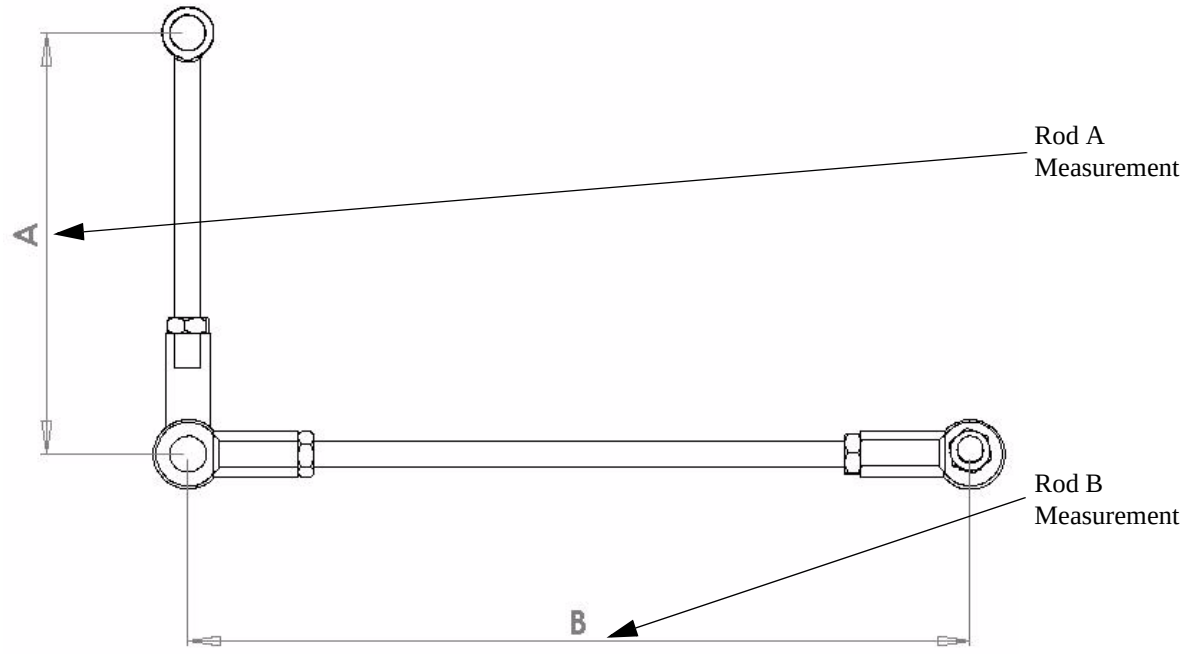


Note: The linkage rod after-assembly center-to-center lengths are shown in *Table 2-2*. *Figure 2-11* shows the measurement points for the assembled linkage rods.

Table 2-2 Assembled Linkage Rod Length

Item	Length
Rod A	6.5" (165mm)
Rod B	10" (254mm)

Figure 2-11 Linkage Rod Measurement Points (Assembled)

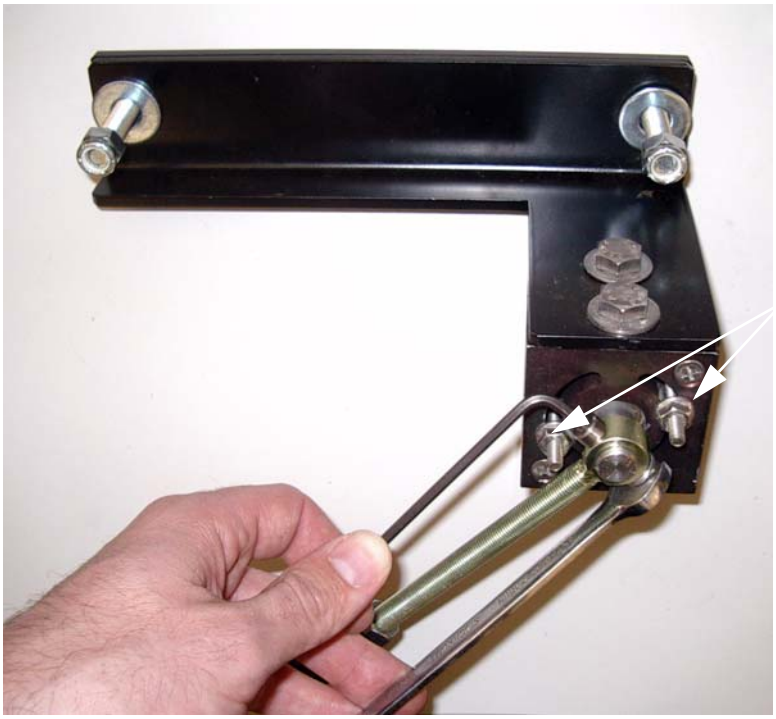


Attaching and Adjusting Wheel Angle Sensor Linkage Rods

1. Install the short linkage arm on the wheel angle sensor shaft.
2. Attach the Wheel Angle Sensor linkage rod to the Wheel Angle Sensor. See *Figure 2-13*.

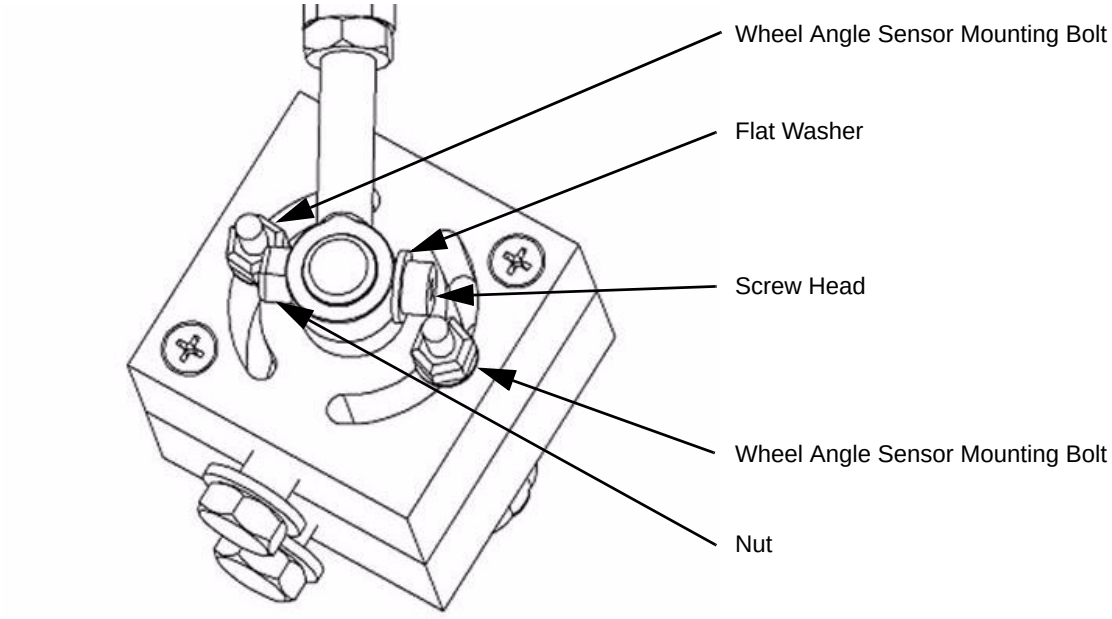
Note: Leave the Wheel Angle Sensor mounting bolts loose so the sensor can be rotated after installation on the vehicle.

Figure 2-12 Attaching the Linkage Arm to Sensor



3. Ensure a flat washer is placed under the screw head when attaching the linkage rod to the sensor shaft. See *Figure 2-13*.

Figure 2-13 Washer on Shaft Screw



Note: The washer should be on the bolt head side and not the nut side of the assembly.

Note: Do not turn the steering system or drive the vehicle before the wheel angle sensor has been adjusted using the AutoSteer Calibration screens. The potentiometer can only rotate a maximum of 180 degrees and if it is rotated beyond its mechanical stops, it will be permanently damaged.

4. Attach the sensor bracket to the vehicle frame in the position shown, using the supplied bolts, nuts and washers.
5. Tighten the mounting bolts using a 9/16 socket and ratchet with a 9/16 socket.

Note: Do not attach the remaining linkage arm.

Note: *Figure 2-14* shows a complete Wheel Angle Sensor installation. However, in this installation step the second linkage rod should not be attached.

Figure 2-14 Wheel Angle Sensor Bracket Installed

6. Install the linkage bracket using the supplied bolts, nuts and washers. See *Figure 2-15*.
7. Tighten the linkage bracket bolts using a 9/16 socket and ratchet with a 9/16 wrench.

Figure 2-15 Linkage Bracket Mounted

8. Install the long threaded linkage on the tie rod bracket using a ball joint.
9. Tighten the ball joint to the bracket with a 1/2" and 9/16" wrench.

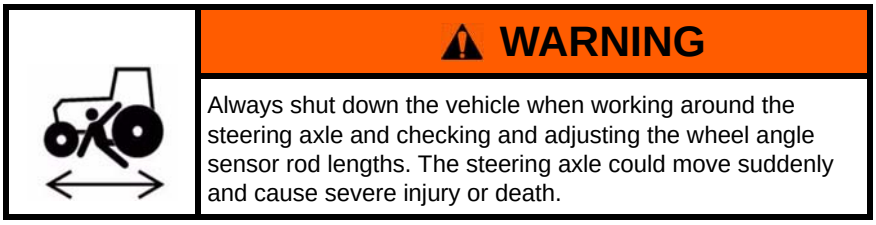
Note: Do not attach linkage rod to wheel angle sensor rod at this time.

---

10. With the linkage rods disconnected, turn the steering wheel so the wheels or tracks are centered (the vehicle will travel straight ahead when moving).
11. Temporarily attach the linkage rods.

Note: Never attach the linkage rods to wheel angle sensor rod and turn the steering system manually or automatically until the fit has been verified. The linkage rods must remain apart while the steering system is turned to the maximum right and left positions and then temporarily attached at these positions. Failure to do this may cause the wheel angle sensor or vehicle to become damaged.

Note: After the linkage rods are assembled in the following steps, they should move freely without touching any other parts and without overextending. Make any necessary adjustments to the linkage rods if there is an interference problem.



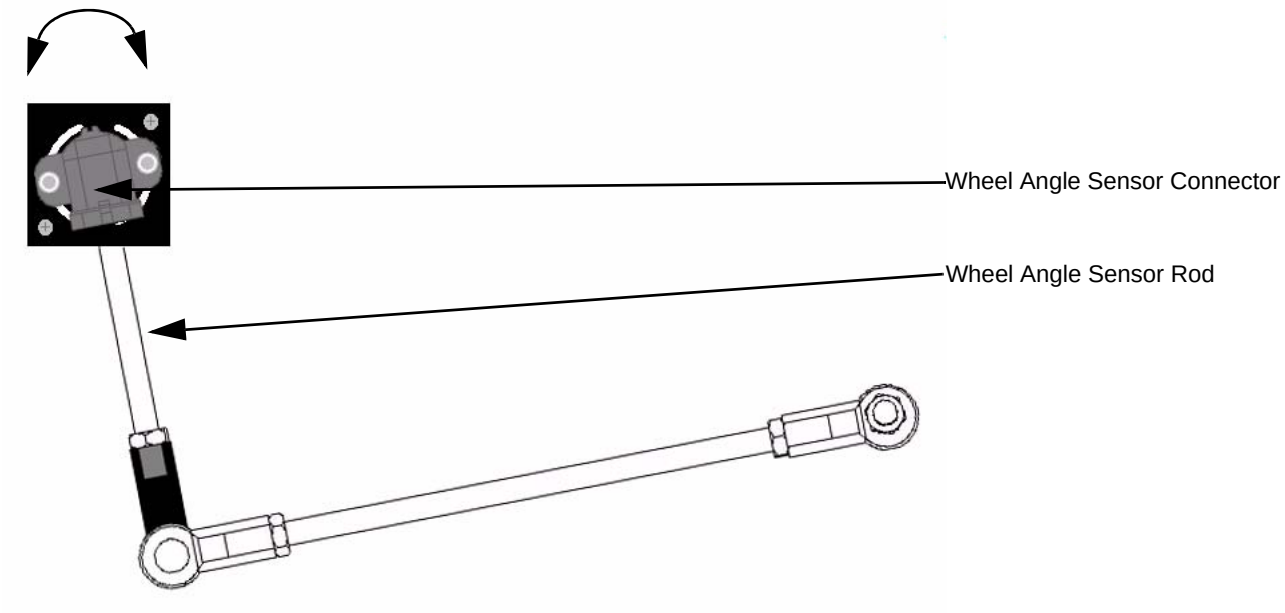
⚠ WARNING

Always shut down the vehicle when working around the steering axle and checking and adjusting the wheel angle sensor rod lengths. The steering axle could move suddenly and cause severe injury or death.

12. Rotate the wheel angle sensor potentiometer on top of the mounting block so that the wire connector is parallel to the wheel angle sensor rod. See *Figure 2-16*.

Note: The vehicle should be parked in a straight ahead position when adjusting the potentiometer angle.

Figure 2-16 Adjusting Potentiometer Angle

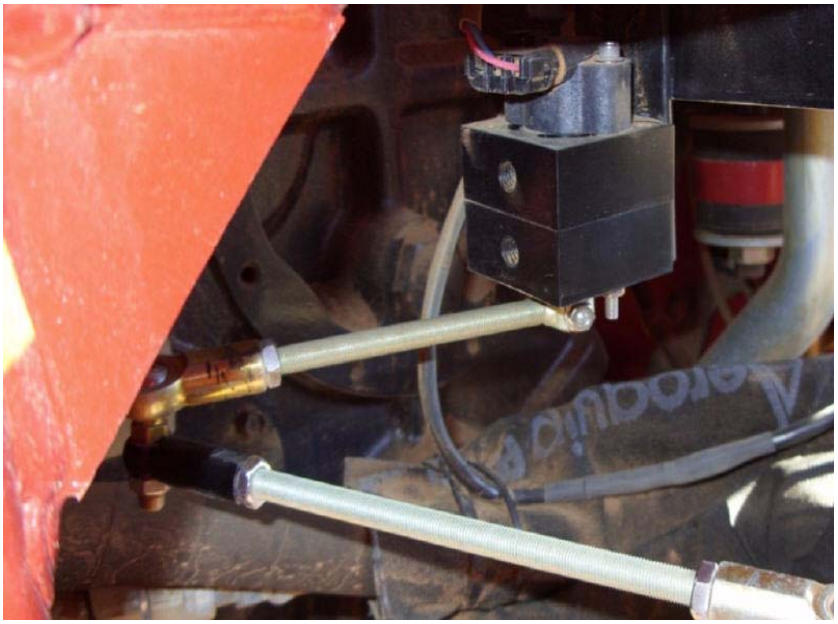


13. Disconnect the linkage rods and turn the steering wheel manually to the full left position.

14. Reattach the linkage assembly and verify that the sensor will not be damaged. See *Figure 2-17*,

15. Adjust the rod lengths as necessary.

Figure 2-17 Full Left Wheel Angle Sensor Test

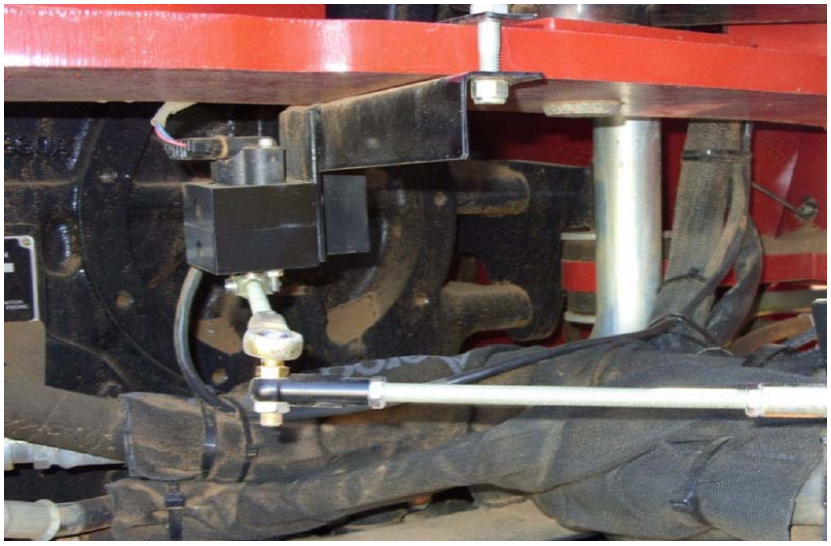


16. Disconnect the linkage rods and turn the steering wheel manually to the full right position.

17. Reattach the linkage assembly and verify that the sensor will not be damaged. See *Figure 2-18*.

18. Adjust the linkage rod lengths as necessary.

Figure 2-18 Full Right Wheel Angle Sensor Test

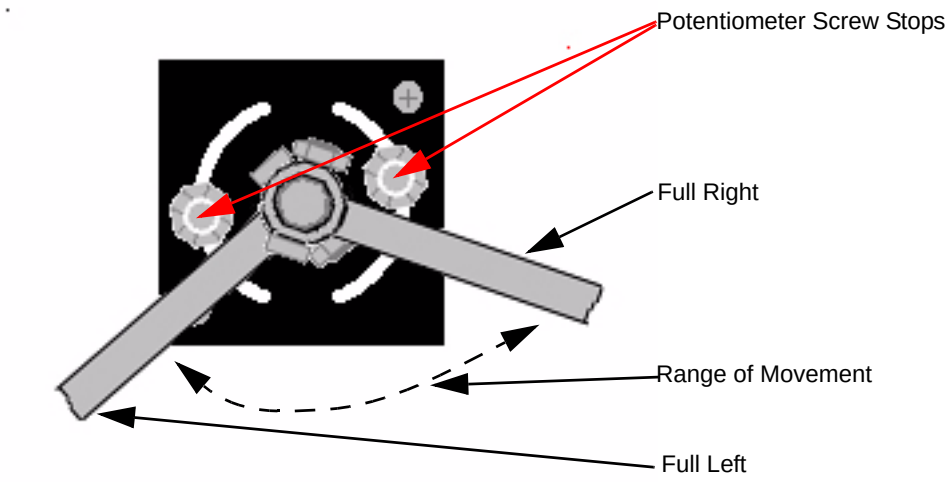


19. Rotate the sensor, adjust the length of either linkage arm and/or reposition the sensor mounting bracket on the vehicle frame (if necessary) to get the maximum sensor movement.

20. Test the remaining linkage arm for length at hard left and hard right to ensure sensor travel is not exceeded.

Note: The maximum movement is reached when the Wheel Angle Sensor rod sweeps from approximately 3/16 inch (5mm) from both stop bolts when the steering system is turned to the maximum right and left positions. See *Figure 2-19*.

Figure 2-19 Maximum Sensor Movement (as seen from bottom)



Note: An Ohm meter can also be used to determine if there is enough sensor movement. Connect the Ohm meter to pins A and B of the Wheel Angle Sensor. Measure the Ohm reading at the maximum left and right position. After subtracting the smaller number from the larger number, there should be at least a 3.75 kilohms change. The reading should also never go below 1.6 kilohms or higher than 6.6 kilohms as this is reaching the limits of the potentiometer and could damage the sensor.

21. When all the adjustments are complete, tighten all linkage rod lock nuts and bolts and the wheel angle sensor rod. See *Figure 2-20*.

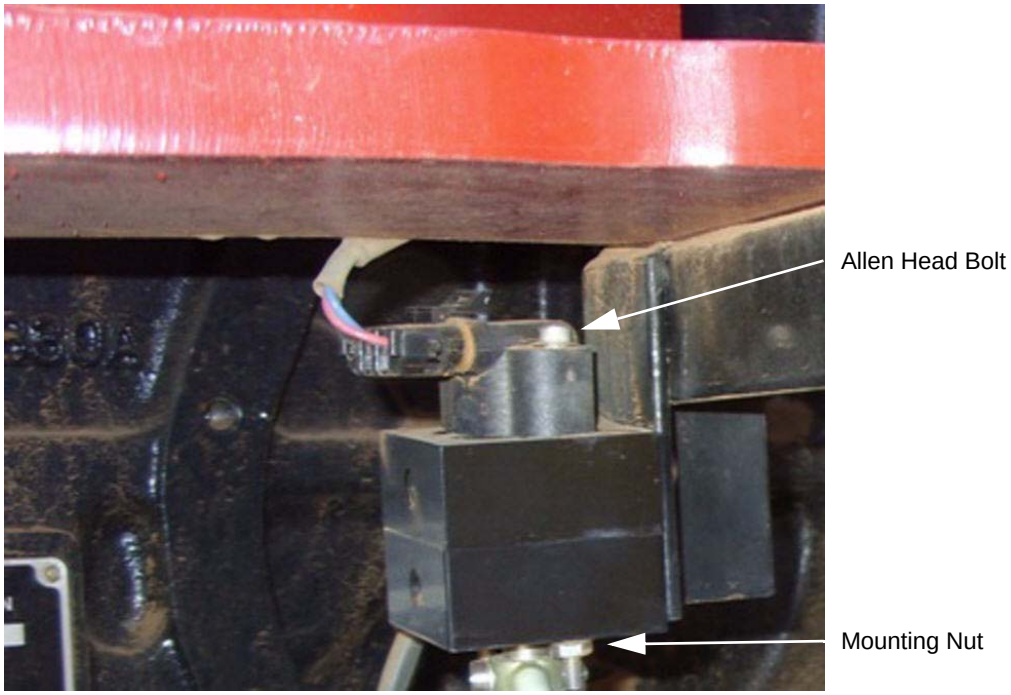
Note: A 1/2" and two 9/16" wrenches are required to tighten the connections.

Figure 2-20 Linkage Rod Ball Joint Bolt (different vehicle shown)

22. Tighten the two screws securing the potentiometer to the wheel angle sensor, after final adjustments. See *Figure 2-21*.

Note: Use a 1/8" hex key and a 3/8" wrench.

Figure 2-21 Potentiometer Mounting Bolts



SA Module Installation

This **SA Module Installation** chapter contains information on installing the AutoSteer SA Module.

Installation Procedure

Note: The following instructions provide recommended SA Module mounting instructions. However due to the variety of options available on vehicles and the possible configuration differences, it may be necessary to install the SA Module in an alternative location. If an alternative location is required, choose a location where the SA Module is protected from damage from moving parts or crop debris and excessive moisture from weather and cleaning equipment.

1. Lift up the passenger seat and remove the storage bucket from beneath it. See *Figure 3-1*.

Figure 3-1 Lifting the Seat

2. Remove the storage bucket from beneath the seat. See *Figure 3-2*.

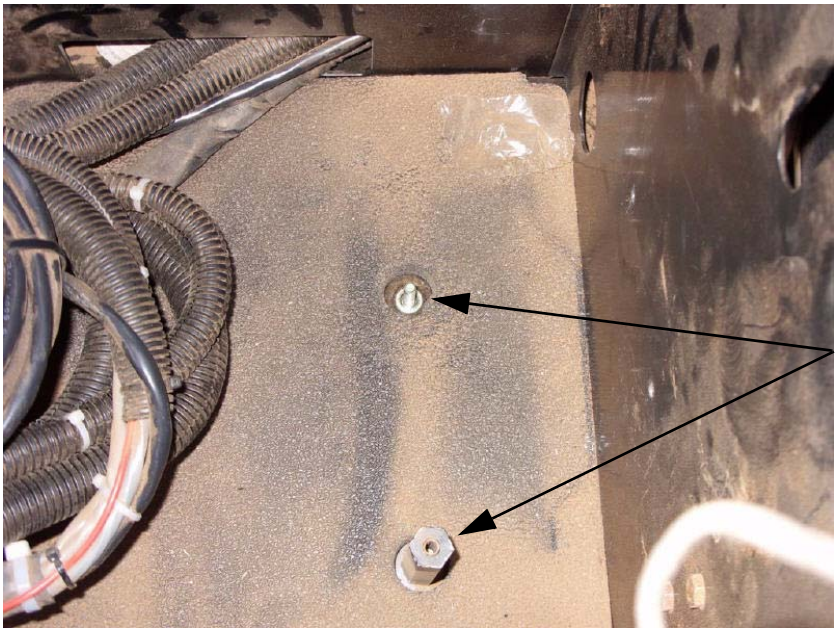
Note: Removing the storage bucket provides access from above to the large cab left hand side compartment.

Figure 3-2 Removing the Storage Bucket

3. Remove one pre-existing threaded mount on the rear right hand side. See *Figure 3-3*.

Note: If the mount screw does not unscrew, it may be necessary to grip the insert using pliers from beneath the cab.

Figure 3-3 Removing Mounting Bolts

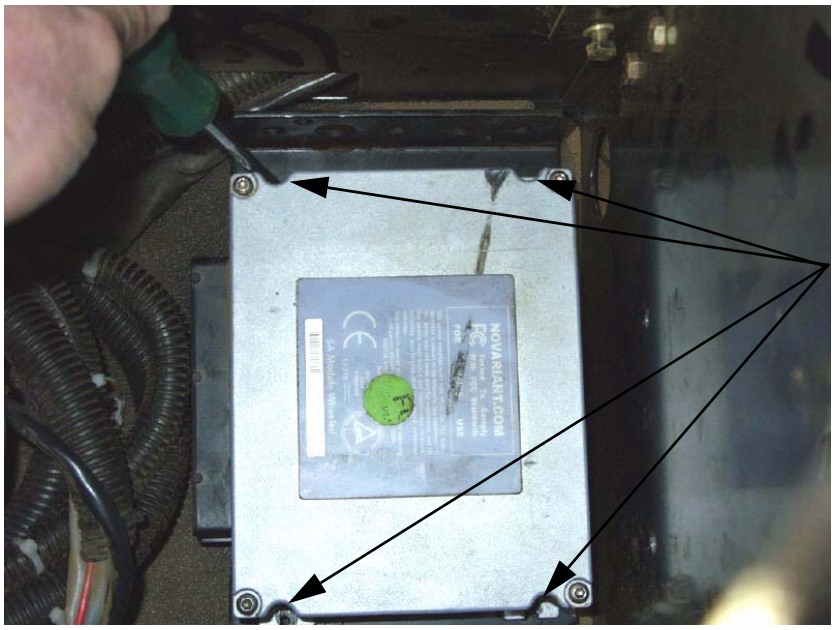


4. Install SA Module bracket over threaded stud with an M6 nut and washer. See *Figure 3-4*.
5. Tighten the nut using a 10mm wrench.

Figure 3-4 Mounted SA Module

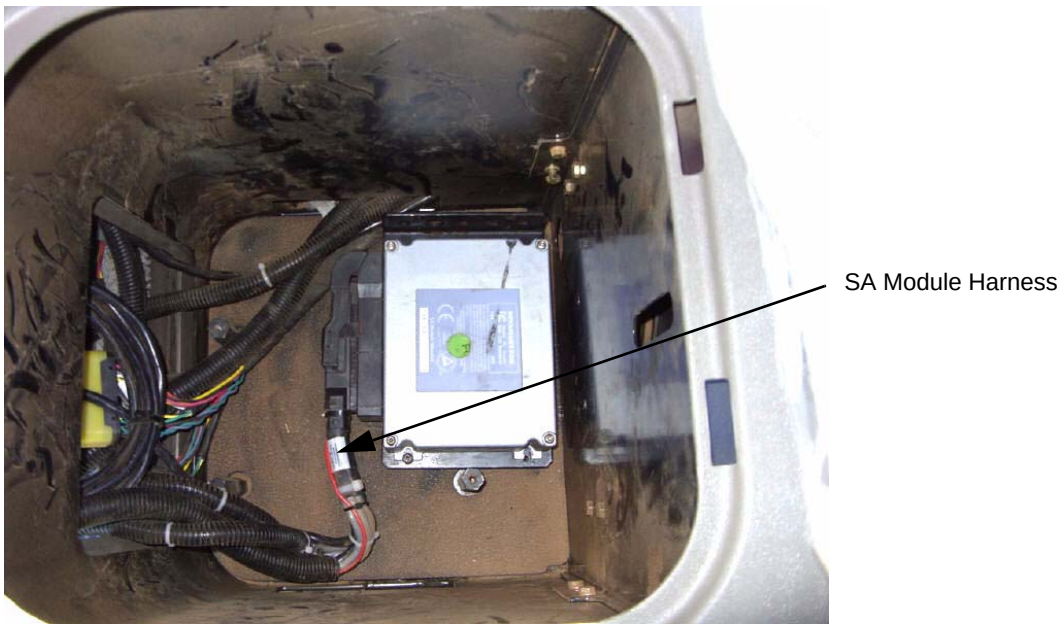
6. Install the SA Module to the SA Module bracket using the screws provided and a #2 Phillips screwdriver. See *Figure 3-5*.

Figure 3-5 Mounting SA Module to Bracket



7. *Figure 3-6* shows the SA Module mounted.

Figure 3-6 SA Module Mounted (shown with SA Module Harness attached)



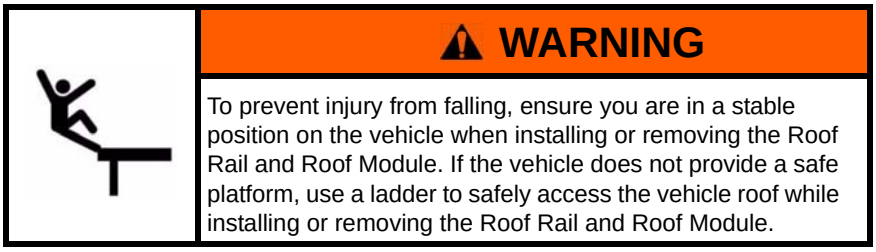
Roof Module Installation

This **Roof Module Installation** chapter contains information in the following sections:

- *Safety Notes*
- *Installation Procedure*

Safety Notes

- The AutoSteer system must be powered OFF when installing or removing the Roof Module.
- The Roof Module must always be firmly secured to the Roof Rail using the hardware whenever the vehicle is in operation to prevent the Roof Module from releasing from its bracket and falling.
- The Roof Module must be removed when transporting the vehicle at speeds above 30 mph.
- Ensure you are in a safe position when attempting to access the cab roof. If necessary for safety, use a ladder to access the roof. Ensure you do not fall or drop the Roof Module.


WARNING
To prevent injury from falling, ensure you are in a stable position on the vehicle when installing or removing the Roof Rail and Roof Module. If the vehicle does not provide a safe platform, use a ladder to safely access the vehicle roof while installing or removing the Roof Rail and Roof Module.

Installation Procedure

1. Remove the two rear cab roof bolts using a 24mm socket and ratchet, reuse the bolts to secure the AutoSteer Roof Module bracket. See *Figure 4-1*.

Note: Longer bolts and spacer washers are provided for installations where the rail needs to be raised above the roof.

Figure 4-1 Removing Bolts for Rail Installation

2. Attach the Roof Rail using the previously removed bolts along with the extra M16 flat washer supplied in cab roof bolt kit. See *Figure 4-2*.
3. Tighten the bolts securely with a 24mm socket and ratchet.

Figure 4-2 Attaching Roof Module Rail with Bolts

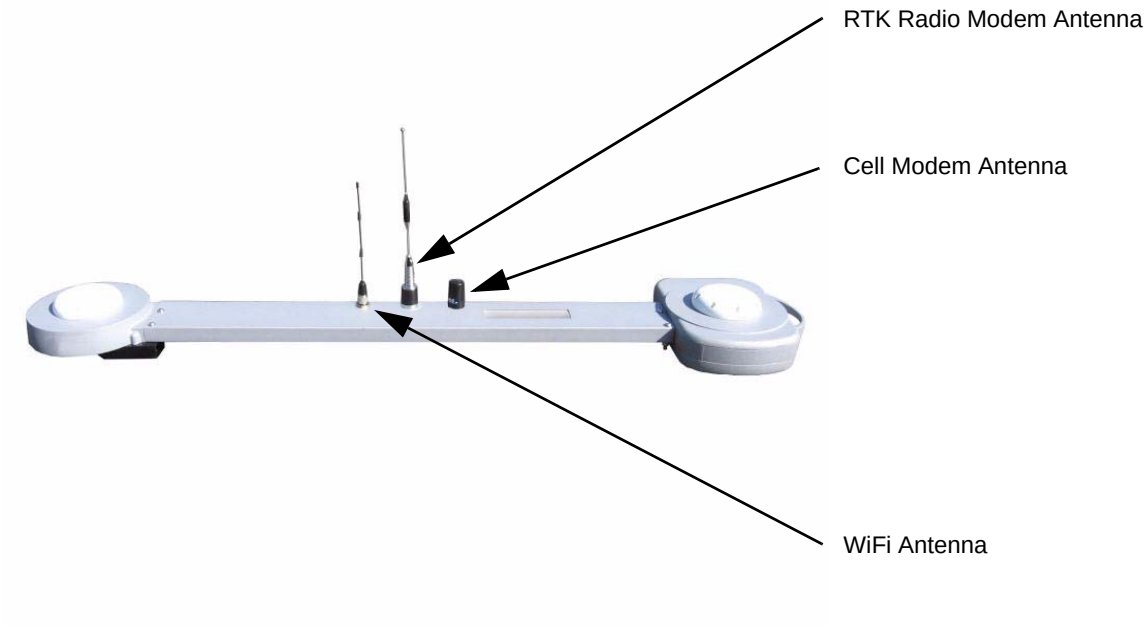
4. *Figure 4-3* shows the Roof Module bracket installed.

Figure 4-3 Mounting Rail Installed

5. Attach the three antennas to the proper Roof Module antenna connections. See *Figure 4-4*.

Note: Hand tighten the connections. Do not use tools or over tighten.

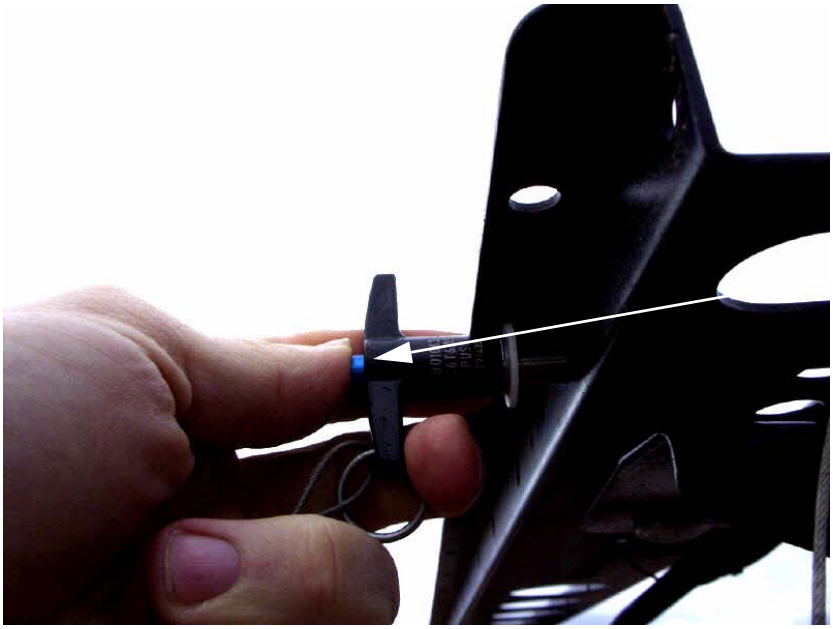
Figure 4-4 Antennas Attached to the Roof Module



6. Remove the locking pin from the Roof Rail. See *Figure 4-5*.

Note: Press the button on the end of the handle to enable pin removal.

Figure 4-5 Removing the Quick Release Pin



7. Place the Roof Module on the rail. See *Figure 4-6*.

Figure 4-6 Mounting Roof Module on Rail

8. Reinsert locking pin. See *Figure 4-7*.

9. Test the tightness of the Roof Module from side-to-side.

Figure 4-7 Reinserting the Locking Pin

10. The Roof Module is now installed. See *Figure 4-8*.

Figure 4-8 Roof Module Installed

Display Installation

This **Display Installation** chapter contains information for installing the display

1. Locate the holes on the right side cab post. See *Figure 5-1*.

Figure 5-1 Mounting Holes on Cab Post

2. Mount the bracket to the cab frame.

Note: Use the longer bolts and spacer bushings supplied in the installation kit. Use the spacer bushing between the bracket and the cab post.

---

3. Tighten the two bracket bolts using a socket and ratchet. See *Figure 5-2*.

Figure 5-2 Display Mounting Bracket Installed

4. Mount smaller bracket to the main bracket, using nuts and bolts supplied. Tighten the bolts using a 14mm socket and ratchet. See *Figure 5-3*.

Figure 5-3 Attaching Smaller Bracket to Main Bracket

5. Attach the RAM mount to the display mounting bracket. See *Figure 5-4*.

Figure 5-4 Attaching RAM Mount to the Display Bracket

Note: Refer to the display User Manual for the remaining display specific installation instructions.

Connecting System Cables

This **Connecting System Cables** chapter provides information for connecting the Main Cable Harness and the SA Module Cable Harness to various vehicle and AutoSteer components in the following sections:

- *SA Module Harness*
  - *SA Module Connection*
  - *Optional AutoSteer Wheel Angle Sensor*
- *Main Cable Harness*
  - *Roof Module*
  - *Display*
  - *Power Supply Connection*
    - *Cab Power Connection*
    - *Battery Power Connection*
- *Install Warning Label*

SA Module Harness

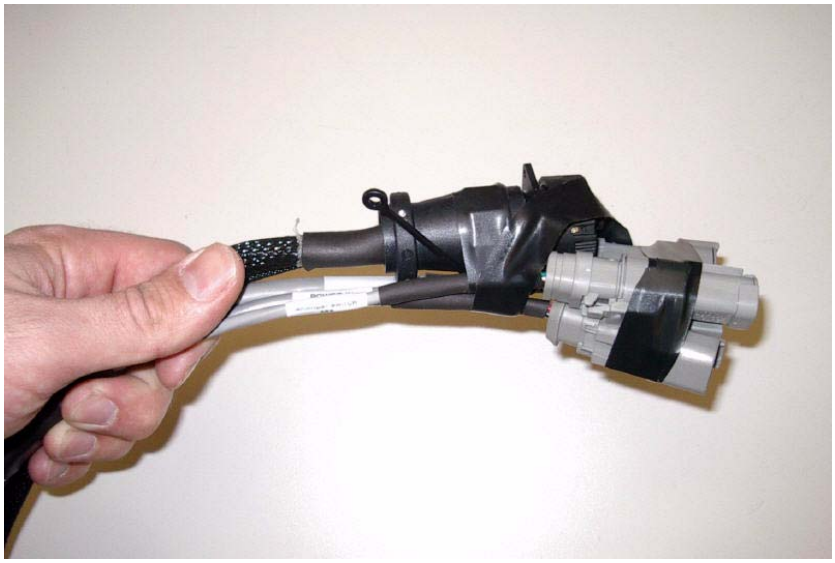
This **SA Module Harness** section contains the following sub-sections:

- *SA Module Connection*
- *Optional AutoSteer Wheel Angle Sensor*

SA Module Connection

1. Tape the SA Module connectors together with electrical tape. See *Figure 6-1*.

Figure 6-1 SA Module Harness Cables Bundled with Electrical Tape



2. Push the SA Module Harness cable through the hole in the compartment bottom.
3. Leave the SA Module Harness connector inside the compartment. See *Figure 6-2*.

Figure 6-2 SA Module Harness Connector into Compartment

4. Route the cable behind the seat to the electrical box on the cab right-hand side. See *Figure 6-3*.

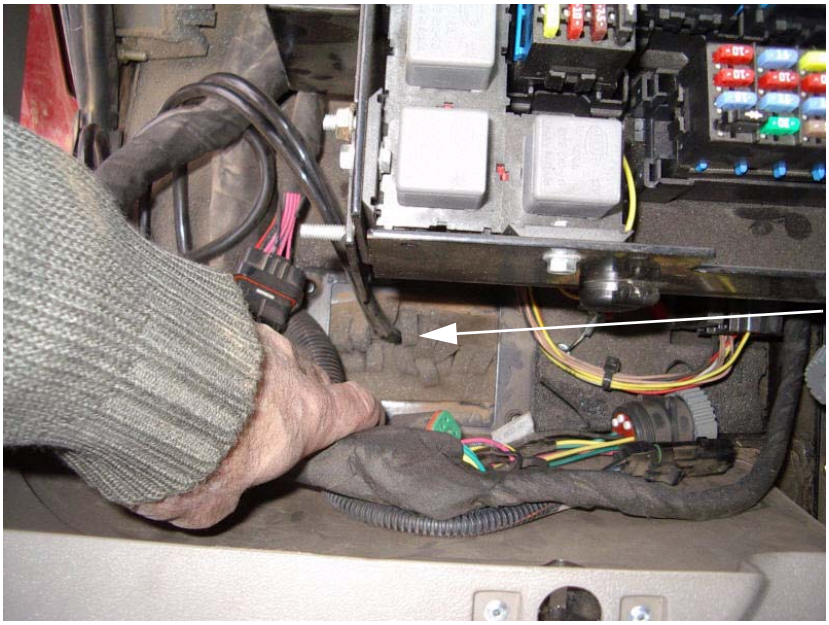
Figure 6-3 SA Module Harness Connectors Routed to Electrical Box

Note: The hole behind the seat is useful for access to the cable midway through the routing process. See *Figure 6-4*. It may help to pass something in from the right-hand side cavity to this hole and attach it to the SA Module harness to pull it through the rest of the way.

Figure 6-4 Access Hole Behind Driver Seat

5. Press the round Accuguide connector through the cab floor hole after the cables are routed to the electrical box right-hand side. See *Figure 6-5*.

Figure 6-5 Passing Cable Through Floor Access Hole

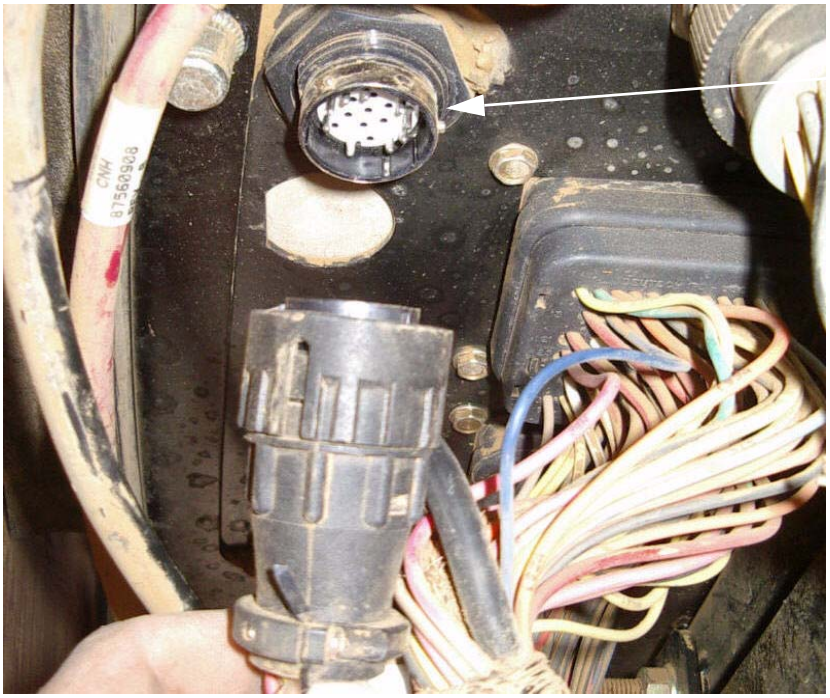


6. Locate the factory loom under the rear of the cab. See *Figure 6-6*.

Figure 6-6 Factory Loom Location

7. Disconnect the factory loom. See *Figure 6-7*.

Figure 6-7 Disconnecting Factory Loom



8. Connect the Accuguide connector on the AutoSteer SA Module harness to the factory loom. See *Figure 6-8*.

Figure 6-8 Connecting SA Module Harness to Factory Loom

9. Fit a dust cap to the original factory loom connector under the cab rear. See *Figure 6-9*,

Figure 6-9 Dust Cap On Factory Loom Connector

10. Align the SAM Harness connector to the SA Module. See *Figure 6-10*.

11. Open the connector latch lever. See *Figure 6-10*.

Figure 6-10 Connecting SA Module Connector

12. Press the SA Module Harness connector onto the SA Module connector.

Note: You can damage the connectors if your force them into position. Do not force them together or use tools.

13. Press the latch lever closed until it clicks and locks the connector. See *Figure 6-11*.

Figure 6-11 Closing the SA Module Connector

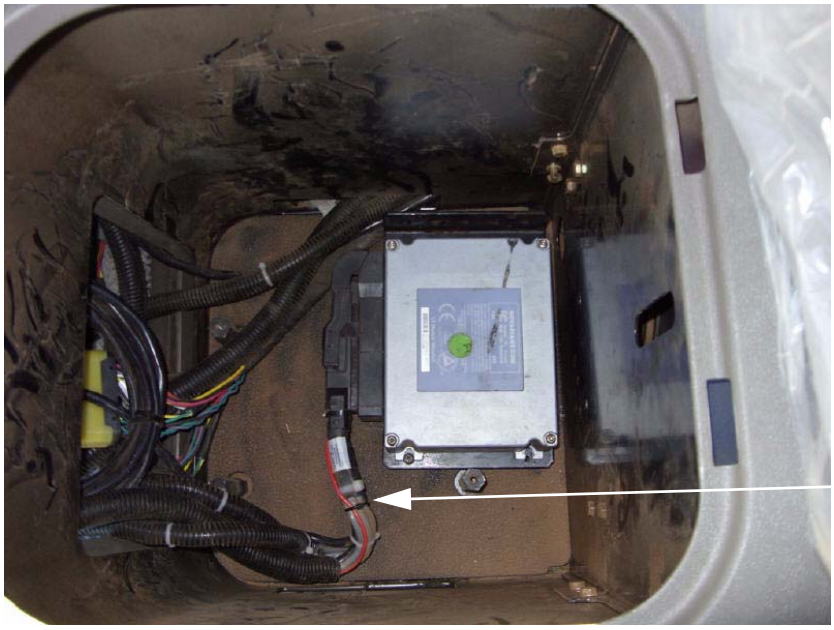
Note: If you need to disconnect the SA Module connector, you must open the latch lever before attempting to pull the connectors apart.

14. Close the cable connector locking mechanism as shown in *Figure 6-12*.

Figure 6-12 SA Module Connector (closed).

15. The SA module is now connected. See *Figure 6-12*.

SA Module Connected to SA Module Harness

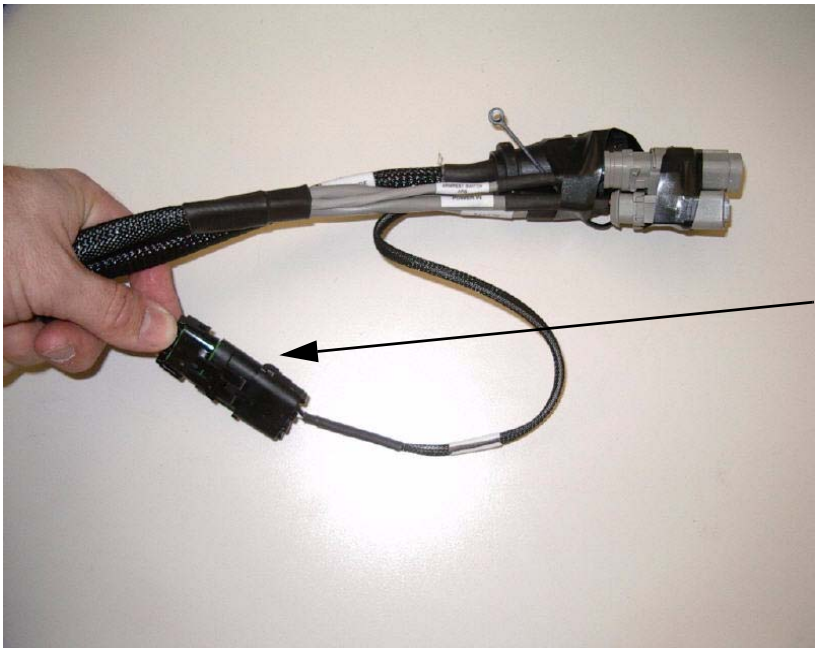


16. Proceed to the *Optional AutoSteer Wheel Angle Sensor* procedure.

Optional AutoSteer Wheel Angle Sensor

Note: If the optional wheel angle sensor is used, separate the three pin connectors shown in *Figure 6-13*.

Figure 6-13 SAM Harness WAS IN Connectors

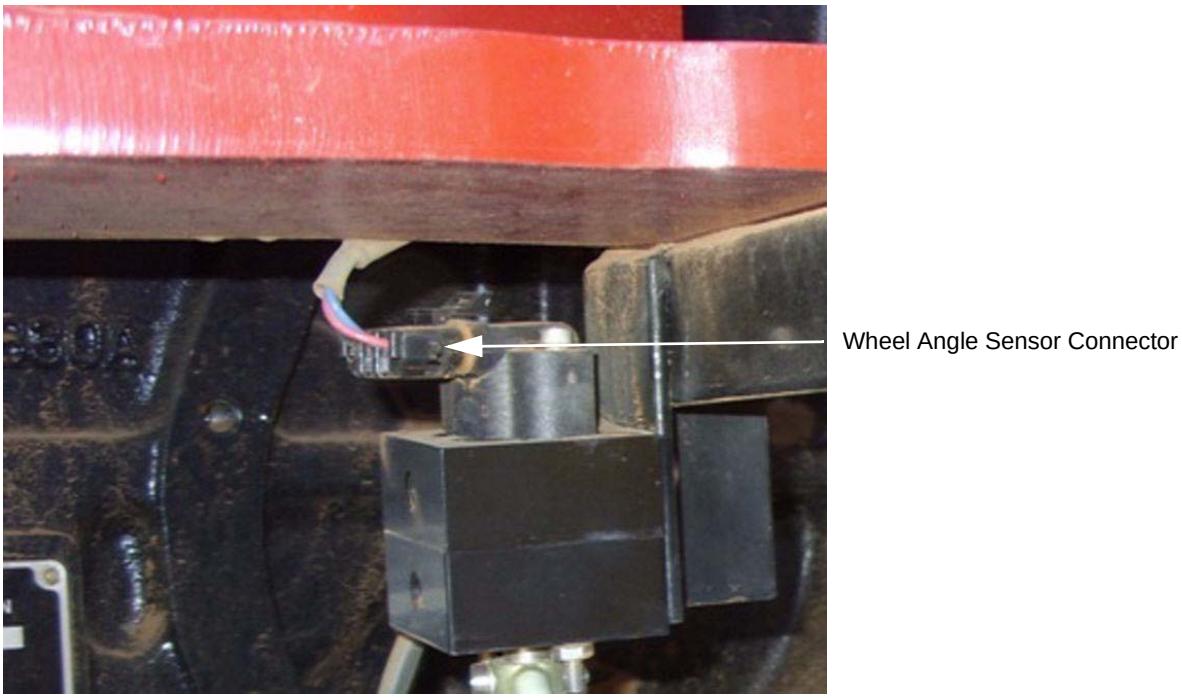


17. Pass the WAS IN connector out through the cab floor as shown in *Figure 6-14*.

Figure 6-14 Wheel Angle Sensor Connection Floor Feedthrough

18. Attach the WAS IN cable connector to the Wheel Angle Sensor. See *Figure 6-15*.

Figure 6-15 Wheel Angle Sensor Cable Connection



19. Secure all cables with cable ties.

Main Cable Harness

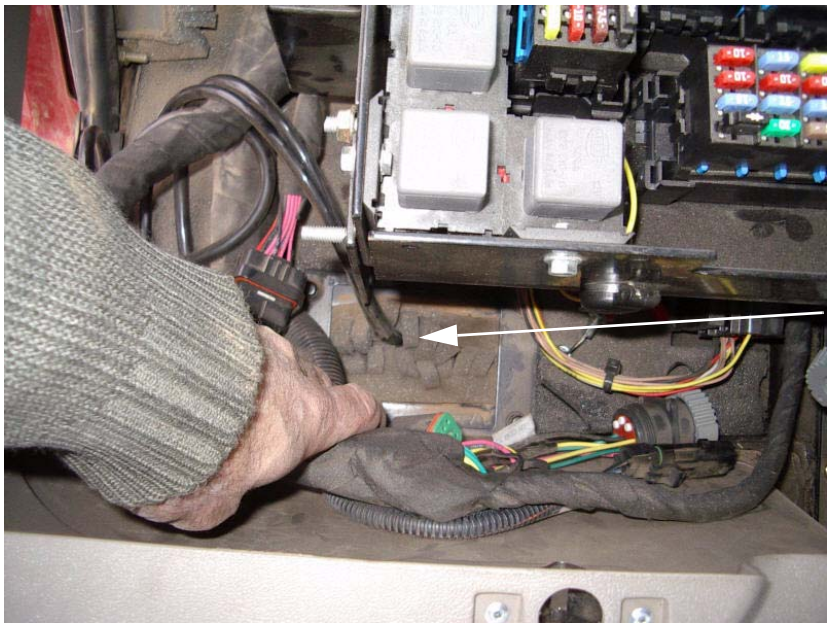
This Main Cable Harness section contains the following sub-sections:

- *Roof Module*
- *Display*
- *Power Supply Connection*
- *Power Supply Connection*

Roof Module

1. Push the Main Cable Harness Roof Module connector end down through the cab floor hole. See *Figure 6-16*.

Figure 6-16 Passing Cable Through Floor Access Hole



2. Open the battery box door to access the underside of the cab entry point.

Figure 6-17 Battery Box Door

3. Pull harness through hole in floor of cab. See *Figure 6-18*.

Figure 6-18 Routing Antenna Cable Though Cab Floor

4. Route the cable up the cab side. See *Figure 6-19*.

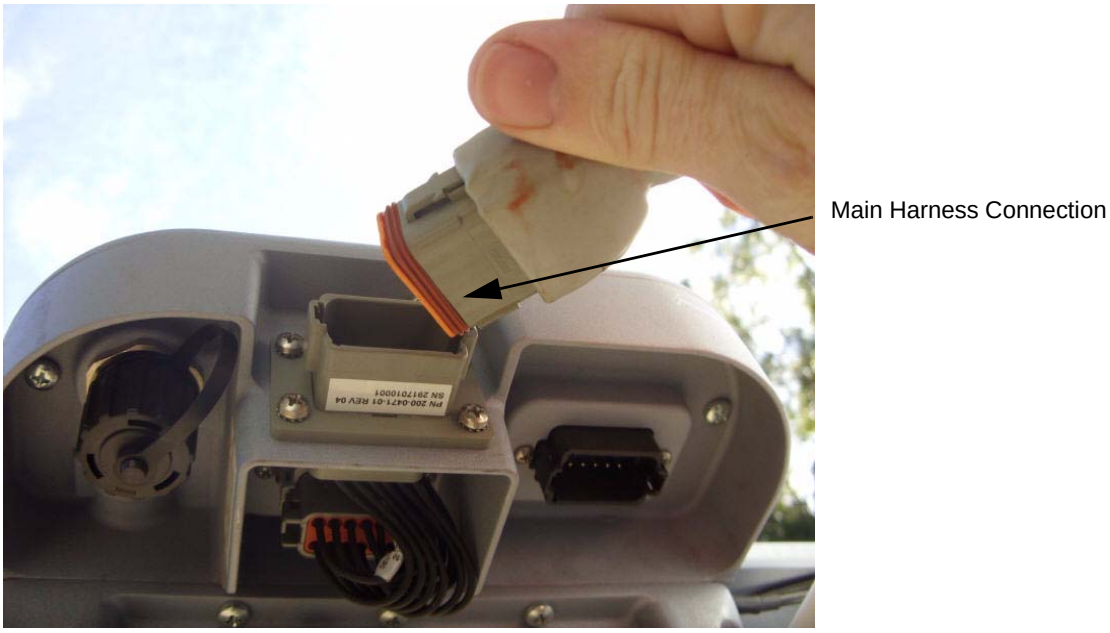
Figure 6-19 Route Main Harness Up Cab Right Side

5. Secure the cable to Roof Module bracket using cable ties.

Figure 6-20 Securing Main Cable Harness

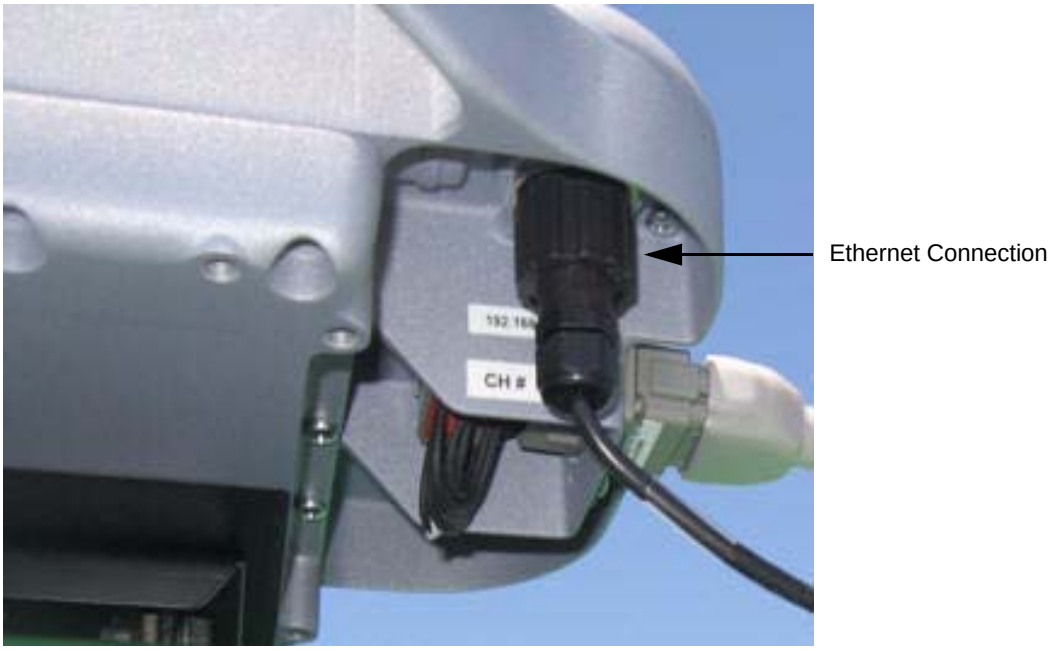
6. Connect the Main Harness to the Roof Module connector. See *Figure 6-21*.

Figure 6-21 Connecting the Main Harness to Roof Module



7. Connect the Ethernet cable to the Roof Module. See *Figure 6-22*.

Figure 6-22 Roof Module Ethernet Connection



Display

1. Attach the Main Cable Harness to your display harness.

Note: Refer to your Display Owners manual for details on connecting the display harness.

Power Supply Connection

The following sub-sections describe basic instructions for connecting the AutoSteer system to available vehicle power sources:

- *Cab Power Connection*
- *Battery Power Connection*

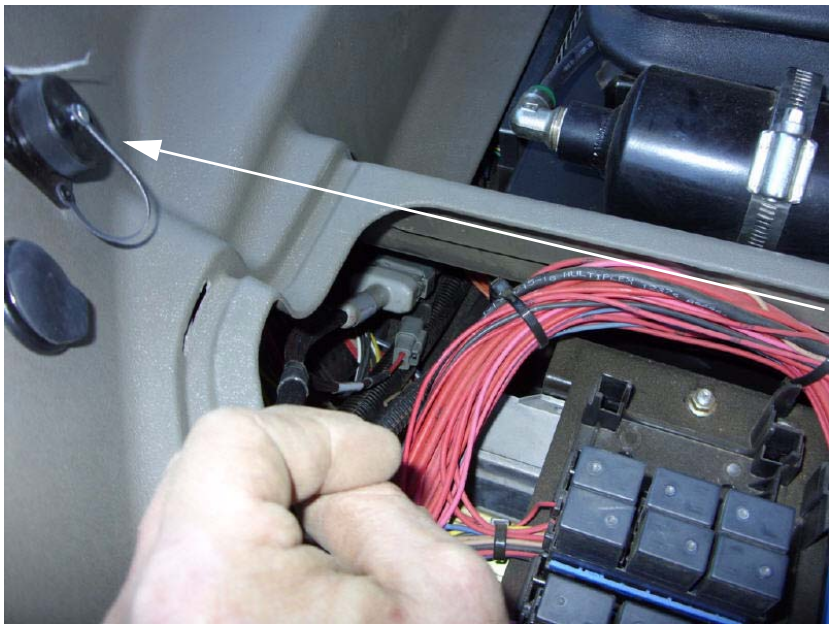
Note: Refer to your display user manual before connecting the AutoSteer system to vehicle power.

The AutoSteer Main Cable Harness must be connected to a 3-pin 12V power source. Your display user manual provides specific instructions for connecting power to the AutoSteer system and specifies the appropriate vehicle power source.

Cab Power Connection

1. Locate the cab console right-side 12V convenience power outlet. See *Figure 6-23*.
2. Use this 12V accessory power connector if the display manual specifies connecting to power inside the cab.

Figure 6-23 Convenience Power Outlet



Battery Power Connection

1. Locate the vehicle battery. See *Figure 6-24*.

Note: You must open the battery box door to access the vehicle battery. See *Figure 6-24*.

---

2. Connect to the vehicle battery if the display manual specifies a direct battery connection.

Figure 6-24 Vehicle Battery Location

Note: A battery cable is provided with the AutoSteer system when a direct battery connection is required.

Install Warning Label

Install the Warning label on the cab window in a position that is easy to read and does not obstruct the driver's view of the road or surrounding obstacles. See *Figure 6-25*.

Note: Install the warning label with the language that best matches the operator's language. If necessary, install labels in multiple languages. Warning labels are provided in the following languages: English, French, German and Spanish.

Figure 6-25 Autosteer Warning Label

Post-Installation Procedures and Information

This **Post-Installation Procedures and Information** chapter contains information on procedures and processes that should be completed after the installation process is complete. The information for this chapter is contained in the following sections:

- *Verify the Vehicle is Ready for AutoSteer*
- *Calibration and Tuning Notes*

Verify the Vehicle is Ready for AutoSteer

1. Ensure all connectors are properly coupled.
2. Power ON the AutoSteer system.
3. Verify installation and system operation.

Calibration and Tuning Notes

Note: For optimal steering performance, the AutoSteer system must be fully calibrated and then tuned.

Select the appropriate Case AccuGuide or New Holland Intellisteer vehicle model when setting up your vehicle on the AutoSteer system display.

Final Hardware Installation Checklist

This **Final Checklist** chapter contains the verifications steps necessary after the installation of the AutoSteer system.

Note: The Final Hardware Installation Checklist is on the back of this page. Fill in the checklist after the installation. You should keep a copy of this checklist and this manual for future reference when servicing the AutoSteer system.

Machine Model: _____ Year: _____ Serial #: _____

Customer Name: _____

Location/Address: _____

AutoSteer Installation Kit Part Number: _____

NOTES

_____

_____

_____

_____

_____

_____

Name of Installer: _____ Date: _____

System Installation Checklist

1. Wheel Angle Sensor Installed and all fasteners are tight. (optional) ☐
2. Monitor Bracket Installed and all fasteners are tight. ☐
3. Roof Rail is installed and all fasteners are tight. ☐
4. SA Module is installed and all fasteners are tight. ☐
5. All cable ends are connected. ☐
6. All cables are secured with cable ties. ☐

AutoSteer Performance Checklist

1. Complete AutoSteer system calibration. ☐
2. Complete AutoSteer system tuning. ☐
3. Check total wheel angle sensor counts. ☐ Value_____
4. Line acquisition is good. ☐
5. On-line steering is good. ☐
6. Manual override (kick-out) is working. ☐
7. Steering speed from lock-to-lock is satisfactory. ☐ Value_____Sec.